

## 8<sup>TH</sup> STREET ARCH BRIDGE REHABILITATION PUBLIC OPEN HOUSE

Improving our  
existing infrastructure  
while preserving  
history.



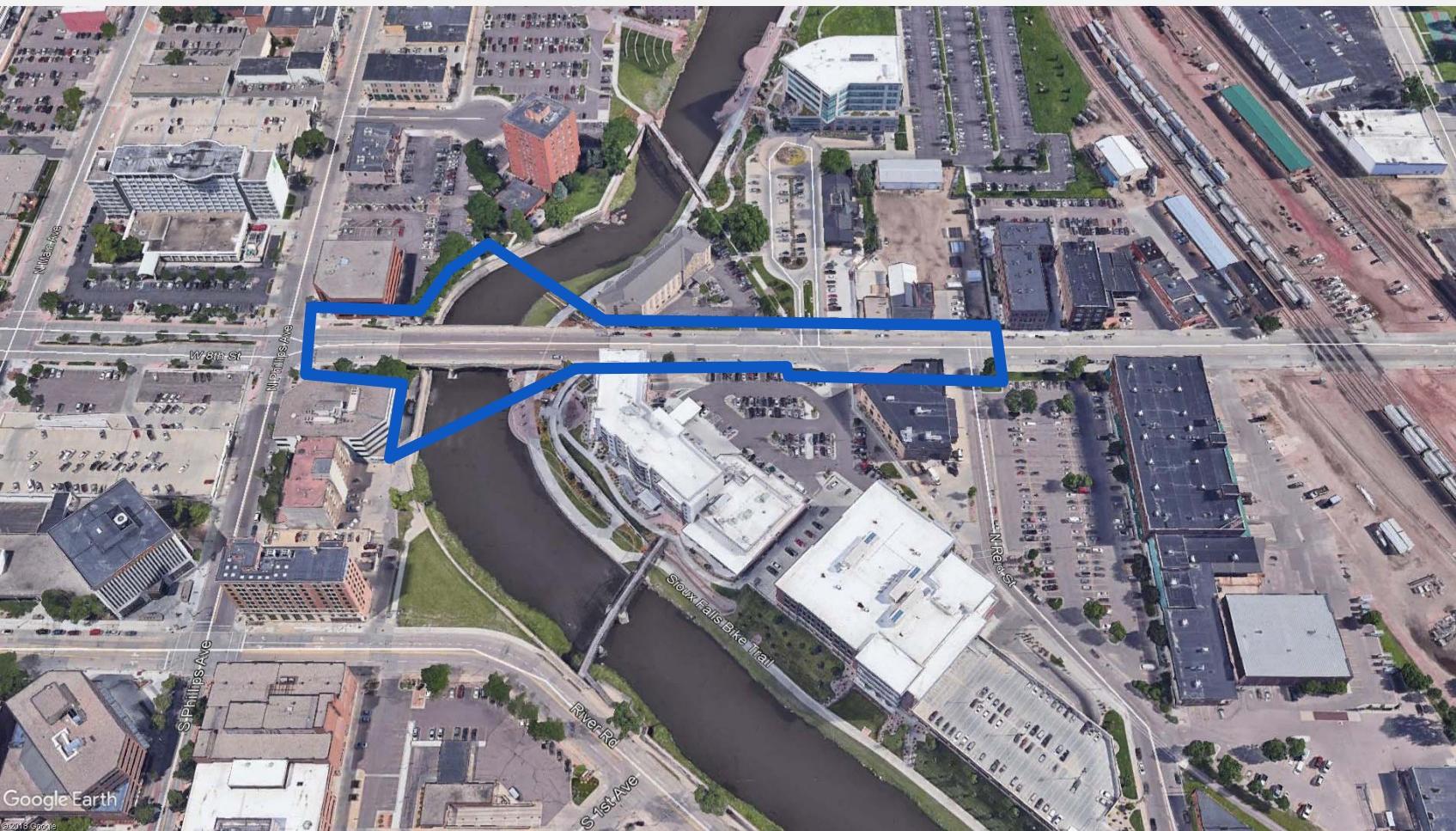
## 8<sup>TH</sup> STREET ARCH

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- PROJECT AREA
- HISTORY & ANALYSIS
- PROPOSED RENDERINGS
- PROPOSED REPAIRS
- NEXT STEPS

## 8<sup>TH</sup> STREET ARCH

## PROJECT AREA



CITY OF SIOUX FALLS  
**PUBLIC WORKS**  
Providing a Better Quality of Life for You!

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## HISTORY

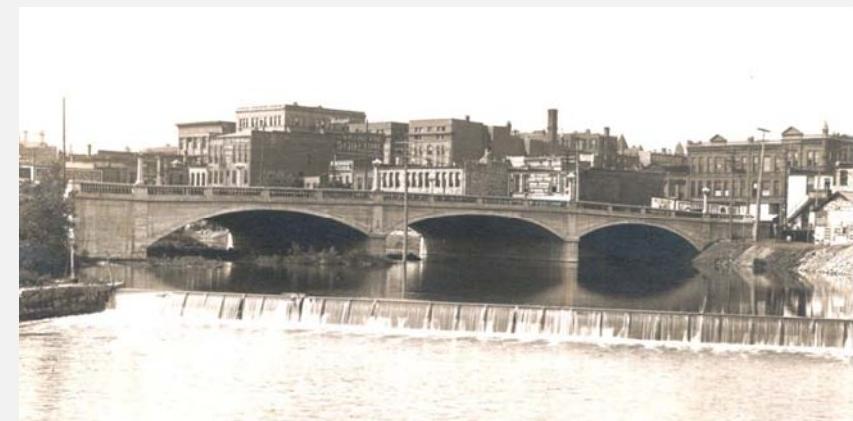
### FIRST crossing of the Big Sioux River in the City of Sioux Falls



1876 – Washed out by Flooding



1882 – Proved Insufficient  
for increasing demands



1912 – “The greatest and most costly  
concrete bridge in South Dakota”

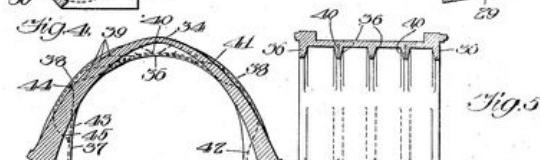
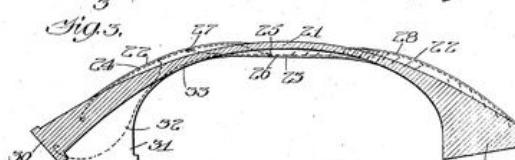
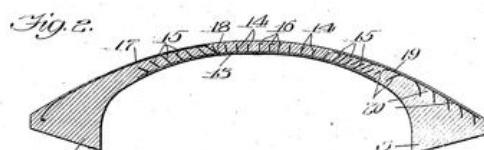
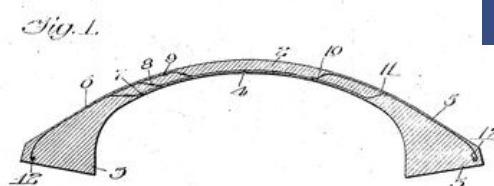
-Source: Western Contractor 1911

# 8<sup>TH</sup> STREET ARCH

## HISTORY

No. 853,183.

PATENTED MAY 7, 1907.  
D. B. LUTEN,  
CONCRETE OR SIMILAR ARCH.  
APPLICATION FILED JUNE 24, 1905.



Witnesses:  
Robert H. Deir  
W. Perry Hallen

Inventor  
Daniel B. Luten  
By  
Robert Lewis Ames  
Attest:

Luten Arch



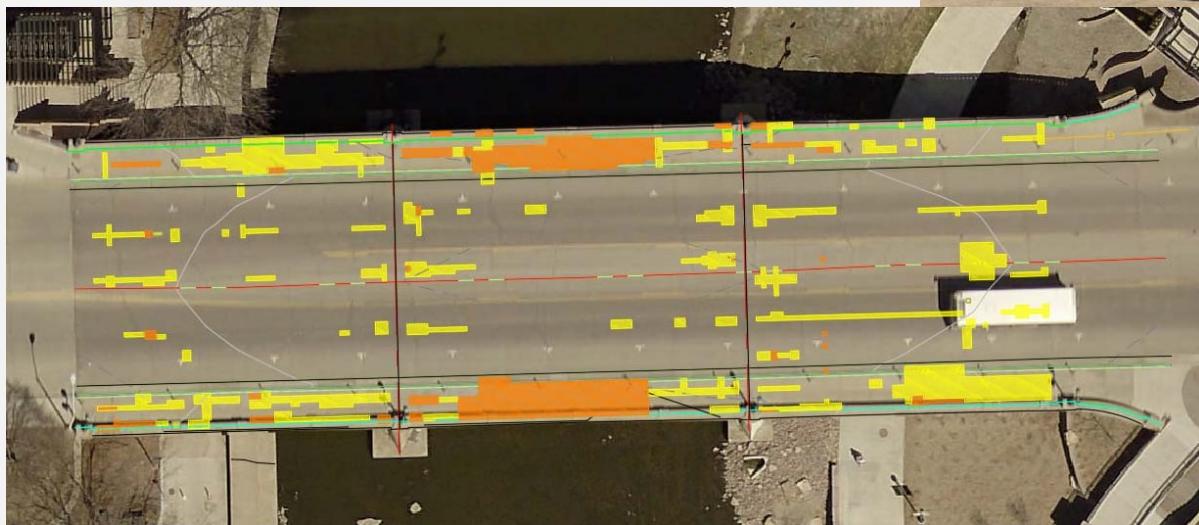
Luten Arches were considered flood-proof and came with a 5 year warranty.

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# ANALYSIS

## NEED FOR ANALYSIS:

- Age
- Condition
- Evaluate Rehabilitation Viability



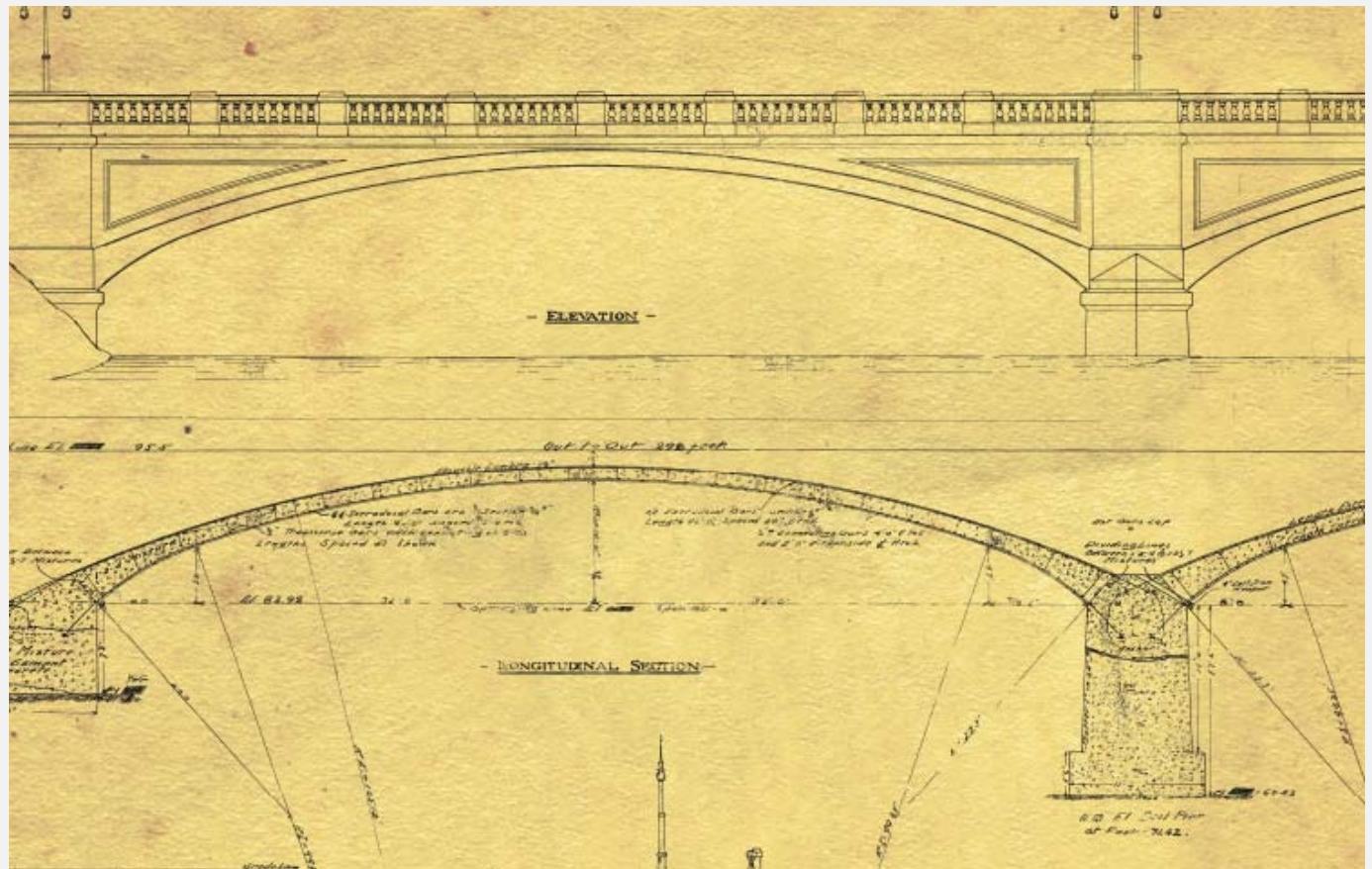
Minor deterioration & delamination (<1")  
 Moderate deterioration

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## ANALYSIS

Rehabilitation is viable:

- Design Life
- Construction timeline
- Cost
- History



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## PROPOSED RENDERINGS



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## PROPOSED RENDERINGS

